Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

AIR QUALITY PERMIT

Issued under 401 KAR 52:020

Permittee Name:	**Kentucky Electric Steel Acquisitions Company, LLC**
Mailing Address:	**P. O. Box 2119** **Ashland, KY 41105**
Source Name:	**Kentucky Electric Steel Acquisitions Company, LLC**
Mailing Address:	**P. O. Box 2119** **Ashland, KY 41105**
Source Location:	**2700 W. So Big Run Road off of US 60**
Permit Number:	**V-05-030**
A. I. Number:	**337**
Log Number:	**56490**
Review Type:	**Title V Renewal, Synthetic Minor, NSPS, PSD**
Source ID #:	**21-019-00020**
SIC Code:	**3312**
Activity #:	**APE20040001**
Regional Office:	**Ashland Regional Office** **1550 Wolohan Drive, Suite 1** **Ashland, KY 41102-8942** **(606) 929-5285**
County:	**Boyd**
Application Complete Date:	**June 19, 2004**
Issuance Date:	
Expiration Date:	

_____

John S. Lyons, Director
Division for Air Quality

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Definitions: The following definitions apply to all abbreviations and variables used in this permit:

PT – total particulate matter
PM10 – particulate matter equal to or smaller than 10 micrometers
CO – carbon monoxide
NO_x – nitrogen oxides
SO_2 – sulfur dioxide
Pb – lead
VOC – volatile organic compounds

SECTION A – PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

GROUP REQUIREMENTS:

20.1 - 20.3 (2,3,6) Meltshop

Description: Meltshop consisting of:

2-Lectromelt electric arc furnaces (EAFs) A and B
1-Ladle metallurgical furnace (LMF)
6-Oxy-Fuel burners for EAFs

Annual Hours of Operation: 8760 hours/year
Control Device: Baghouse
Construction Commenced: EAFs January 1981
LMF January 1995
Oxy-Fuel Burners 1998

APPLICABLE REGULATIONS:
401 KAR 63:021 Existing Sources Emitting Toxic Air Pollutants
40 CFR 60, Subpart AA Standards of Performance for Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and on or Before August 17, 1983

1. **Operating Limitations:**
   a) To preclude 401 KAR 51:052 (Review of New Sources in or Impacting upon Nonattainment Areas) and meet synthetic minor stipulations the total steel production from both EAF shall not exceed 403,200 tpy. Also, steel production from each EAF shall not exceed 34 tph.

   b) Pursuant to 40 CFR 60.274 (b), (c), and (d) the permittee:
      i. Shall either ensure the control system fan amperes shall fall within the same range of values recorded during the latest performance test (see **Testing Requirements**) or install, calibrate and maintain a monitoring device that continuously records the volumetric flow rate at the baghouse inlet. A shop opacity compliance demonstration shall be performed to establish the volumetric flow rate and damper positions.
      ii. May petition the Administrator for reestablishment of these parameters whenever the owner or operator can demonstrate to the Administrator's satisfaction that the EAF operating conditions upon which the parameters were previously established are no longer applicable. The values of these parameters as determined during the most recent demonstration of compliance shall be maintained at the appropriate level for each applicable period; and
      iii. May petition the Administrator to approve any alternative method that will provide a continuous record of operation of each emission capture system.

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

c) Pursuant to 60.274 (f) Except as provided for under §60.273(d), where emissions during any phase of the heat time are controlled by use of a direct shell evacuation system, the owner or operator shall install, calibrate, and maintain a monitoring device that continuously records the pressure in the free space inside the EAF. The pressure shall be recorded as 15-minute integrated averages. The monitoring device may be installed in any appropriate location in the EAF or DEC duct prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring device shall have an accuracy of ±5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions.

d) The steel production from the LMF shall not exceed 68 tph and 403,200 tpy.

Compliance Demonstration Method:

a) The permittee shall record monthly EAF and LMF production and hours of operation. The monthly production rates shall be used to comply with annual (12-month rolling total) limits. Also, the monthly production rate and hours of operation shall be used to calculate compliance with hourly production limits.

b) See the **Monitoring** and **Recordkeeping requirements**.

2. Emission Limitations:

a) Pursuant to 40 CFR 60.272 (a) (1) through (3)

i. Particulate emissions from the baghouse excluding the LMF emissions shall not exceed 0.0052 grains/dscf.

ii. Visible emissions from the baghouse shall not equal or exceed 3% opacity.

iii. Visible emissions from the melt shop and due solely to operations of the EAFs shall not exhibit 6% opacity or greater except:

1. Shop opacity less than 20% may occur during charging periods.
2. Shop opacity less than 40% may occur during tapping periods.
3. Opacity standards under paragraph (iii) shall apply only during periods when the monitoring parameter limits specified in Section **(1)** (b) (see **Operating Limitations**) are being established unless the permittee elects to perform daily shop opacity observations in lieu of furnace static pressure monitoring; and
4. Where the capture system is operated such that the roof of the shop is closed during the charge and the tap, and emissions to the atmosphere are prevented until the roof is opened after completion of the charge or tap, the shop opacity standards under paragraph (iii) shall apply when the roof is opened and shall continue to apply for the length of time defined by the charging and/ or tapping periods.

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

b) Pursuant to 40 CFR 60.272 (b) the visible emissions from dust handling equipment shall not equal or exceed 10% opacity.

Compliance Demonstration Method:

See **Testing Requirements** and **Specific Monitoring** below.

3. **Testing Requirements:**

a) A stack test shall be conducted within a year of issuance of this permit, to determine compliance with the allowable particulate emissions rate, as listed in this permit, from the baghouse. The owner or operator shall notify the Division of the performance test at least 30 days prior to the proposed test date and shall obtain approval from the Division for the procedures that will be used to determine compliance (See **Section D**).

b) The performance test shall be used to establish the minimum control system fan amperage and all damper positions, during all periods in which the hood is operated for the purpose of capturing emissions from the EAFs, and the maximum pressure in the free space inside the EAFs, during the meltdown and refining periods. These parameters shall be established using the same equipment, approved by the Division, and used to demonstrate compliance with these values on a continuous basis.

c) For the periods when the EAFs' free space static pressure and fan amperage are being established, the emissions exiting the melt shop shall not exceed 20% opacity during charging periods and 40% opacity during tapping periods.

d) The value of the static pressure shall be the highest 15-minute integrated average recorded during the performance test where the permittee can show that the visible emissions limit of 6% opacity specified in 40 CFR 60.272 (a)(3) was achieved.

e) The acceptable range for the control system fan amperes shall be based upon the range of values recorded during the performance test where the permittee can show that the visible emission limit specified in 40 CFR 60.272(a)(3) was achieved.. The lower end of the range shall be 15% below the lowest fan amperes recorded during the test where compliance with the opacity standard is demonstrated and the upper end of the range shall be 15% above the highest fan amperes recorded during the test where compliance with the opacity standard is demonstrated. Only static pressure and fan amperes data from time periods during which the permittee has collected visible emission observations of the EAFs' shop openings in accordance with 40 CFR 60, Appendix A, Method 9 may be used to establish the acceptable ranges for these operating parameters.

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f) Pursuant to 40 CFR 60.274 (i) (1) through (4) During the performance test, the permittee shall monitor the following information for all heats covered by the test:
   i. Charge weights and materials;
   ii. Tap weights and materials;
   iii. Heat times, including start and stop times. A log of process operation including periods of no operation during testing and the pressure inside the furnace where direct shell evacuation systems are used;
   iv. Control device operation log; and
   v. Continuous opacity monitor or Method 9 data.

g) Pursuant to 40 CFR 60.275 (a) No gaseous diluent shall be added to the effluent gas after the fabric in the control system, unless the amount of dilution is separately determined and considered in the determination of emissions. Pursuant to 40 CFR 60.275 (c) When emissions from any EAFs are combined with emissions from facilities not subject to the provisions of Subpart AA, the permittee shall use either or both of the following procedures to demonstrate compliance with 60.272(a)(3):
   i. Determine compliance using the combined emissions;

   ii. Shut down operation of facilities not subject to the provisions of Subpart AA during the performance test.

h) Pursuant to 40 CFR 60.275 (d) (4) All test runs performed to comply with requirements listed for this emission point shall be conducted concurrently, unless inclement weather interferes.

i) Pursuant to 40 CFR 60.275 (e) (1) Method 5D shall be used for positive-pressure fabric filters to determine compliance with the particulate matter concentration limits listed in the permit. The sampling time and sample volume for each run shall be at least 4 hours and 160 dscf. If a single EAF is sampled, the sampling time shall include an integral number of heats.

j) The owner or operator may petition the Division to approve further testing of particulate emissions from the baghouses whenever the owner or operator can demonstrate to the Division's satisfaction that the EAF operating conditions upon which the parameters were established are no longer applicable. Any such petition shall be made at least 30 days prior to the proposed performance test and shall include all the procedures that will be used to determine compliance.

4. Specific Monitoring Requirements:

a) Pursuant to 40 CFR 60.273 a continuous monitoring system is not required on the baghouse if visible observations are conducted by a certified visible emissions observer as follows:

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

i. Visible emission observations from the baghouse shall be conducted at least once per day when the furnace is operating in the melting and refining period;
ii. Visible emission observations from the melt shop shall be conducted at least once per day for a period of six months from the issuance date of this permit. If no visible emission exceedances were recorded during the six month period, then the permittee shall subsequently conduct the observations on a once per week basis. However, if the permittee had an opacity exceedance during the first six months of monitoring, then the permittee shall continue monitoring opacity on a daily basis until a six months monitoring period free of any opacity exceedances has been achieved. Only then, will the permittee be allowed to cut down the frequency of opacity monitoring to a weekly basis. Any opacity exceedances shall be reported to the Ashland field office in the semiannual report; and
iii. Visible emission observations from the operation of dust handling equipment of the baghouse shall be conducted at least once per month from the issuance date of this permit.

These observations shall be made for at least three 6-minute periods and shall be recorded for each point where visible emissions are observed. Where it is possible to determine that a number of these visible emission sites relates to only one incident of visible emissions, one set of three 6-minute observations shall be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident.

b) Pursuant to 40 CFR 60.274 the permittee shall:
   i. Monitor the following daily:
      1. Time and duration of each charge;
      2. Hours of operation for each EAF and the LMF;
      3. Check on a once-per-shift basis
         A. The furnace static pressure, if a monitor is installed. (Note, that KESA is allowed to locate the furnace static pressure monitor in the EAF or DEC duct prior to the introduction of ambient air);
         B. The control system fan motor amperes and damper positions. If the permittee wishes to monitor the control system volumetric flow rate at the inlet to the baghouse as an alternative to monitoring fan amperage, then operations at volumetric flow rates below the value established during the compliance demonstration that was conducted to establish volumetric flow rate and damper positions, shall be reported to the Ashland Regional Office semi-annually.

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ii. Monitor the following monthly to ensure proper operation and record any deficiencies in a log book:
   1. Pressure sensors;
   2. Dampers;
   3. Damper switches; and
   4. Physical observations (e.g. holes in duct work, flow constrictions caused by dents, and/or fan erosion).

iii. Install, calibrate, and maintain a monitoring device that continuously records the pressure in the free space inside the EAF. The pressure shall be recorded as 15 minute integrated averages. The pressure monitoring device shall have an accuracy of plus or minus 5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions.

c) Monthly production rates of each EAF and the LMF shall be monitored.

5. Specific Recordkeeping Requirements:

Pursuant to 40 CFR 60.274 the permittee shall:

a) Keep the following records on a daily basis:
   i. Time and duration of each charge;
   ii. Time and duration of each tap;
   iii. Hours of operation for each EAF and the LMF;
   iv. Record on a once-per-shift basis
      1. The furnace static pressure. The pressure shall be recorded as 15 minute integrated averages (see **testing requirements**). If the permittee wishes to perform shop opacity observations instead, then the permittee shall keep records of all observations. Observations of shop opacity at or above six percent during a meltdown and refining period shall be reported to the Ashland Regional Office semi-annually as an excess emission.
      2. The control system fan motor amperes and damper positions, during all periods the hood is operated for the purpose of capturing emissions from the EAFs (see **testing requirements**); if the permittee wishes to monitor the control system volumetric flow rate at the inlet to the baghouse as an alternative to monitoring fan amperage, then operations at volumetric flow rates below the value established during the compliance demonstration that was conducted to establish volumetric flow rate and damper positions, shall be reported to Ashland Regional Office semi-annually.

b) Monitor the following monthly to ensure proper operation and record any deficiencies in a log book:

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

i. Pressure sensors;
ii. Dampers;
iii. Damper switches; and
iv. Physical observations (e.g. holes in duct work, flow constrictions caused by dents, and/or fan erosion).

c) Record the results of calibrations and maintenance performed on the EAFs' free space continuous pressure measuring device in a log book (if applicable).

d) Keep a record of opacity readings (continuous or Method 9).

e) Keep a record of monthly the production rate of each EAF and the LMF.

6. Specific Reporting Requirements:

Pursuant to 40 CFR 60.276 the permittee shall report the following information:

a) Records of opacity readings from the baghouse shall be maintained for any six-minute average that is in excess of 3% and be reported to the Division's Ashland Regional Office semiannually.

b) Operation at a furnace static pressure that exceeds the value established under 40 CFR 60.274 (g) and either operation of control system fan motor amperes at values exceeding plus or minus 15 % of the value established under 40 CFR 60.274(c) or operation at flow rates lower than those established under 40 CFR 60.274(c). These values may be considered by the Division to be unacceptable operation and maintenance of the affected facility. Operation at such values shall be reported to the Division's Ashland Regional Office semiannually. If the permittee wishes to monitor shop opacity on a daily basis instead, then all daily shop opacity readings in excess of 6% shall be reported to the Ashland Regional Office semiannually.

c) When the permittee is required to demonstrate compliance with the standard under 40 CFR 60.275 (b)(2) or a combination of (b)(1) and (b)(2) of Section 60.275(b), the premittee shall obtain approval from the Division for Air Quality of the procedure(s) that will be used to determine compliance. Notification of the procedure(s) to be used must be postmarked 30 days prior to the performance test.

d) The performance test report that is required under the testing requirements including the following information:
i. Facility name and address;
ii. Plant representative;
iii. Make and model of process, control device, and continuous monitoring equipment;
iv. Flow diagram of process and emission capture equipment including other equipment or process(es) ducted to the same control device;

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

v. Rated (design) capacity of process equipment;
vi. Data required under 40 CFR 60.274 (i) of Subpart AA (see **testing requirements**);
vii. Dates and test times;
viii. Test company;
ix. Test company representative;
x. Test observers from outside agency;
xi. Description of test methodology used, including any deviations from standard reference methods;
xii. Schematic of sampling location;
xiii. Number of sampling points;
xiv. Description of sampling equipment;
xv. Listing of sampling equipment calibrations and procedures;
xvi. Field and laboratory data sheets;
xvii. Description of sample recovery procedures;
xviii. Sampling equipment leak check results;
xix. Description of quality assurance procedure;
xx. Description of analytical procedures;
xxi. Sample emission calculations.

7. Specific Control Equipment Operating Conditions:

The Harsell reverse air baghouse and direct shell evacuation system shall be operated at all times the melt shop operates. The control devices shall be regularly inspected, maintained and operated so as to achieve their design control efficiency. Records shall be kept of all maintenance activities performed on the control device.

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

GROUP REQUIREMENTS:

40.1 & 40.2 (4) Continuous Caster

Description: Continuous caster consisting of:

Natural gas combustion furnace
Continuous caster

Annual hours of operation: 8760 hours/year
Control Device: None
Construction Commenced: June 1968

APPLICABLE REGULATIONS:
401 KAR 61:020 Existing Process Operation

1. **Operating Limitations:**
   Total steel cast shall not exceed 120 tph and 403,200 tpy.

2. **Emission Limitations:**
   Pursuant to 401 KAR 61:020:
   a) Section 3 (1) (a) visible emissions shall not exceed 40% opacity.

   b) Section 3 (2) (a) hourly particulate emissions shall not exceed the following limit:

$$E = 55.0P^{0.11}-40$$

   Where E = allowable hourly particulate emission rate (lb/hr); and
   P = process weight rate (tons/hr) [volume fuel used x density]

   Compliance Demonstration:
   To provide reasonable assurance that the particulate matter emission limitations are being met, the permittee shall monitor the amount of steel cast in the process. The process weight shall be determined as the average hourly tons added to the emission unit averaged over a one-month period. Hourly particulate emissions shall be calculated as follows:

$$PE = (PW \times PEF)$$

   Where PE = Particulate emissions (lb/hr);
   PW = process weight (tons/hr); and
   PEF = particulate emission factor (lb/ ton of process weight as found in the emissions inventory system)

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

3. **Testing Requirements:**
   None

4. **Specific Monitoring Requirements:**
   The permittee shall monitor the following:
   a) The daily molten steel cast;

   b) The monthly hours of operation; and

   c) Visible emissions as measured at least once per month using U.S. EPA Reference Method 9.

5. **Specific Recordkeeping Requirements:**
   The permittee shall retain records of the following:
   a) The daily molten steel cast;

   b) The monthly hours of operation; and

   c) Records of monthly visible emissions.

6. **Specific Reporting Requirements:**
   The permittee shall report all the opacity measurements and particulate emissions that are in excess of the emission limits specified in this permit on a semiannual basis to the Ashland Regional Office.

7. **Specific Control Equipment Operating Conditions:**
   None

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

GROUP REQUIREMENTS:

50.1 & 50.2 Materials Handling

Description: Materials handling consisting of:

Tundish dumping, ladle deskulling, and O_2 lancing
Tundish heater, (3x) ladle preheaters

Annual hours of operation: 8760 hours/year
Control Device: None
Construction Commenced: August 1998

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive Emissions, applies to the particulate matter emissions generating activities, as outlined in this section.

1. Operating Limitations:

Pursuant to 401 KAR 63:010, Section 3 (1), the Permittee shall not cause, suffer, or allow any material to be handled, processed, transported, or stored, without taking reasonable precautions to prevent particulate matter from becoming airborne. Reasonable precautions to prevent particulate matter from becoming airborne shall include, when applicable, but not be limited to the application and maintenance of asphalt, oil, water.

Compliance Demonstration Method:

The Permittee shall maintain and document compliance through completion of monitoring and recordkeeping requirements outlined in this section.

2. Emission Limitations:

Pursuant to 401 KAR 63:010, Section 3 (2), the Permittee shall not cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.

Compliance Demonstration Method:

See the monitoring and recordkeeping requirements below.

3. Testing Requirements:

None

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

4. Specific Monitoring Requirements:

On a daily basis, the Permittee shall inspect the above listed emission units for potential fugitive emissions. If there is a potential for fugitive emissions then reasonable precautions listed above shall be taken.

5. Specific Recordkeeping Requirements:

The Permittee shall maintain a log of daily work practices and monitoring completed as required by this permit. This log shall be maintained on-site in a form suitable for inspection. This log shall contain information on all controls.

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

GROUP REQUIREMENTS:

70.1 - 70.3 (7) Billet Reheat Furnace

Description: Billet reheat furnace consisting of:

Natural gas combustion
#2 fuel oil combustion (backup)
Propane combustion (backup)

Annual hours of operation: 8760 hours/year
Control Device: None
Construction Commenced: September 1981

APPLICABLE REGULATIONS:
401 KAR 59:010 New Process Operation

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   Pursuant to 401 KAR 59:010
   a) Section 3 (1) visible emissions shall not equal or exceed 20% opacity.

   b) Section 3 (2) hourly particulate emissions shall not exceed the following limit:

$$E = 3.59P^{0.65}$$

   Where E = allowable hourly particulate emission rate (lb/hr); and
   P = process weight rate (tons/hr) [volume fuel used x density].

   Compliance Demonstration Method:
   Compliance with the particulate emission standard and opacity standard is assumed while burning fuels listed in the description above.

3. **Testing Requirements:**
   None

4. **Specific Monitoring Requirements:**
   The permittee shall monitor the following:
   a) Monthly fuel usage for each type of fuel; and

   b) The monthly hours of operation.

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

5. **Specific Recordkeeping Requirements:**
   The permittee shall maintain records of the following:
   a) Monthly fuel usage for each type of fuel; and

   b) The monthly hours of operation.

6. **Specific Reporting Requirements:**
   The permittee shall report all the opacity measurements and particulate emission that are in excess of the emission limits specified in this permit on a semiannual basis to the Ashland Regional Office.
7. **Specific Control Equipment Operating Conditions:**
   None

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

GROUP REQUIREMENTS:

90.1 Plant Roadways, Parking Areas, Slag Handling

Description: Plant roadways and parking areas are industrial gravel watered daily. Slag is stored in the gravel slag yard. A sprinkler system is installed in the slag yard.

Annual hours of operation: 8760 hours/year
Control Device: Wet Suppression
Construction Commenced: August 1998

APPLICABLE REGULATIONS:
401 KAR 63:010, Fugitive Emissions, applies to the particulate matter emissions generating activities, as outlined in this section.

1. Operating Limitations:

Pursuant to 401 KAR 63:010, Section 3 (1), the Permittee shall not cause, suffer, or allow any material to be handled, processed, transported, or allow a road to be used without taking reasonable precautions to prevent particulate matter from becoming airborne. Reasonable precautions to prevent particulate matter from becoming airborne shall include, when applicable, but not be limited to the following:

a) Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts;

b) The maintenance of paved roadways in a clean condition;

Compliance Demonstration Method:
The Permittee shall maintain and document compliance through completion of monitoring and recordkeeping requirements outlined in this section.

Slag Operations:

a) Hot, molten slag from the EAFs and the LMF shall be transported in pots and dumped inside the Melt Shop for cooling. Wet suppression shall be used to both cool the slag and reduce fugitive emissions.

b) Wet, cooled slag shall be transported to temporary storage piles outside the Melt Shop via front-end loader.

c) Emissions from slag stockpiles shall be controlled by wet suppression. The permittee shall keep records of the dates/times water is applied to roadways and surfaces; these records shall be made available to the Division personnel upon request.

d) Once full, the permittee shall neither move nor disturb the stockpile until such a time as the slag is transported or processed as described below.

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

e) The permittee shall choose one of the following two options for slag processing:
   i. Slag may be transported and subsequently processed off-site.
   ii. Slag may be stored on site and processed by a mobile facility. Any mobile facility that is hired to perform this processing must use wet suppression to control fugitive emissions from every stage of the operation including crushing and screening.

2. Emission Limitations:

Pursuant to 401 KAR 63:010, Section 3 (2), the Permittee shall not cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.

Compliance Demonstration Method:

See the monitoring and recordkeeping requirements below.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

On a daily basis, the Permittee shall inspect the above listed emission units for potential fugitive emissions. If there is a potential for fugitive emissions then reasonable precautions listed above shall be taken.

5. Specific Recordkeeping Requirements:

The Permittee shall maintain a log of daily work practices and monitoring completed as required by this permit. This log shall be maintained on-site in a form suitable for inspection. This log shall contain information on all controls

SECTION C – INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	Description	Generally Applicable Regulation
1.	2x Natural gas fired direct heat exchanger	
2.	3x Diesel storage tanks (250 gal each)	401 KAR 59:050
3.	Diesel storage tank at melt shop (1000 gal)	401 KAR 59:050
4.	Gasoline storage tank (500 gal)	401 KAR 59:050
5.	Diesel storage tank at fire pump area (500 gal)	401 KAR 59:050
6.	Rolling mill	None
7.	Finishing area	401 KAR 63:010
8.	Hot mill banding	None
9.	Mill scale handling	401 KAR 63:010
10.	Parts washer	401 KAR 63:010
11.	Four reheat furnace tanks	None
12.	3x Alloy hopper	None
13.	Scrap Storage	401 KAR 63:010
14.	Lime Silo w/baghouse	401 KAR 59:010
15.	Carbon Silo	401 KAR 63:010
16.	Billet cutting	401 KAR 63:010

SECTION D – SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

1. **Operating Limitations:**
   Total annual steel production rate shall not exceed 403,200 tons.

   Compliance Demonstration:
   The monthly steel production rate shall be monitored. The annual limit compliance shall be based on a 12 month rolling total. The monthly rate should be used to calculate the 12 month rolling total each month.

2. **Emission Limitations:**
   None

3. **Testing Requirements:**
   Emissions of carbon monoxide, nitrogen oxides, particulate matter, sulfur dioxide, and VOC's as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein. Applicable test methods include the following:
   a) Opacity shall be determined by Reference Method 9.

   b) Particulate matter shall be determined by Reference Method 5 or Reference Method 17 or an acceptable alternate method [401 KAR 59:010, Section 4(1)].

4. **Specific Monitoring Requirements:** To provide reasonable assurance that the visible emission limitations are being met, the permittee shall:

   a) Perform a qualitative visual observation of the opacity emissions from each building opening, stack or vent on a monthly basis, during unit operation and maintain a log of the observations.

   b) Determine the opacity of emissions by Reference Method 9 if visible emissions from any building or structure opening exceed the applicable standard.

5. **Specific Record Keeping Requirements:**
   For each opening, stack or vent in **4. Specific Monitoring Requirements** above, the permittee shall maintain a log of the qualitative visual observations performed. The log shall note whether any air emissions (except for water vapor) were visible from the opening, stack or vent.

SECTION D – SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

6. Specific Reporting Requirements:

Semiannual reports shall be sent to the Division's Ashland Regional Office by January 30 and July 30 each year. See **SECTION F** below.

SECTION E – SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F – MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
    a. Date, place as defined in this permit, and time of sampling or measurements;
    b. Analyses performance dates;
    c. Company or entity that performed analyses;
    d. Analytical techniques or methods used;
    e. Analyses results; and
    f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
    a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
    b. To access and copy any records required by the permit:
    c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.
    Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F – MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

6. The semi-annual reports are due by January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
    a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
    b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within *30 days*. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
    a. Identification of the term or condition;
    b. Compliance status of each term or condition of the permit;
    c. Whether compliance was continuous or intermittent;
    d. The method used for determining the compliance status for the source, currently and over the reporting period.
    e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F – MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Ashland Regional Office
1555 Wolohan Drive, Suite 1
Ashland, KY 41102-8942

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street

Atlanta, GA 30303-8960
Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G – GENERAL CONDITIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
   a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
   b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
   c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

   Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION G – GENERAL CONDITIONS

5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].
6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].

11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.

13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].

SECTION G – GENERAL CONDITIONS

14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
    a. Applicable requirements that are included and specifically identified in the permit and
    b. Non-applicable requirements expressly identified in this permit.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is

SECTION G – GENERAL CONDITIONS

necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements
None

(e) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
   a. An emergency occurred and the permittee can identify the cause of the emergency;
   b. The permitted facility was at the time being properly operated;
   c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
   d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
   e. This requirement does not relieve the source of other local, state or federal notification requirements.

2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:
   RMP Reporting Center
   P.O. Box 3346
   Merrifield, VA, 22116-3346

SECTION G – GENERAL CONDITIONS

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
   a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
   b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
   c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
   d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
   e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
   f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION H – ALTERNATE OPERATION SCENARIOS

None

SECTION I – COMPLIANCE SCHEDULE

None